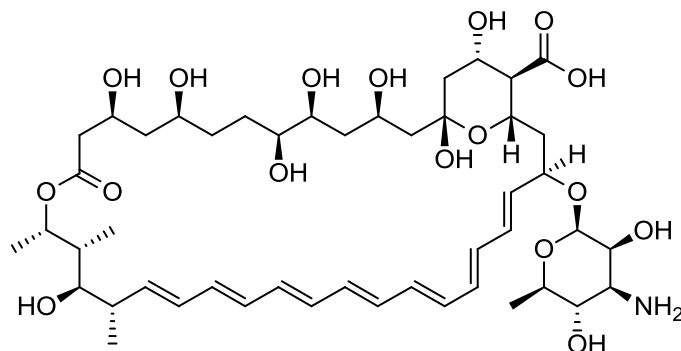


## Amphotericin B

Code No.: **BIA-A1441**

Pack sizes: **5 mg, 25 mg**



Synonyms : Amphotericin

### Specifications

CAS #	: 1397-89-3
Molecular Formula	: <b>C<sub>47</sub>H<sub>73</sub>NO<sub>17</sub></b>
Molecular Weight	: <b>924.1</b>
Source	: <b><i>Streptomyces</i> sp.</b>
Appearance	: <b>Yellow solid</b>
Purity	: <b>&gt;99% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.</b>

### Application Notes

Amphotericin B is heptaene polyene antifungal originally discovered as a metabolite of *Streptomyces nodosus* in 1956. Amphotericin B acts by binding sterols in the cell membrane leading to the formation of transmembrane channels and subsequent ion leakage. Amphotericin B is poorly water soluble so has been developed for therapeutic use as a complex with desoxycholate or in liposomes to improve bioavailability. Amphotericin B is widely used as a research reagent in diverse applications with over 15,000 literature citations.

### References

1. Amphotericins A and B, antifungal antibiotics produced by a streptomycete. II. The isolation and properties of the crystalline amphotericins. Vandeputte J. et al., *Antibiot. Annu.* 1955-1956. 1956, 587.
2. Amphotericin B and its new derivatives – Mode of action. Baginski M. & Czub J. *Current Drug Metabolism* 2009, 10, 459.
3. Liposomal amphotericin B. Therapeutic use in the management of fungal infections and visceral leishmaniasis. Coukell A.J. & Brogden R.N. *Drugs* 1998, 55, 585.